Complete if Known abstitute for form 1449/PTO Application No.: 10/549,865 Filing Date: July 28, 2006 INFORMATION DISCLOSURE Victor Higgs First Named Inventor: STATEMENT BY APPLICANT 2886 Art Unit: (Use as many sheets as necessary) **Examiner Name:** Isiaka O. Akanbi 5 1 Attorney Docket No.: NAN65 US (8037)

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			U.S. PAIE	NT DOCUMENTS	
Examiner Initials*	Cite No.	Document Number Number-Kind Code (If Known)	Publication Date MM-DD-YYYY	Name of Patentee or Application of Cited Document	Pages, Columns, Lines, Where Relevan Passages or Relevant Figures Appear (if known)
	1.	2002/0088952-A1	07-11-2002	Rao et al.	
	2.	2002/0119485-A1	08-29-2002	Morgan	
	3.	2003/0061212-A1	03-27-2003	Smith et al.	
	4.	2003/0094579-A1	05-22-2003	Hasegawa et al.	
	5.	2004/0092042-A1	05-13-2004	Higgs	
·	6.	2006/0281281-A1	12-14-2006	Tanzawa et al.	
	7.	2007/0000434-A1	01-04-2007	Buczkowski	
	8.	2007/0007466-A1	01-11-2007	Laurent et al.	
	9.	2007/0008518-A1	01-11-2007	Hummel et al.	
	10.	2007/0008526-A1	01-11-2007	Buczkowski	
	11.	2007/0176119-A1	08-02-2007	Hummel	
•	12.	4,246,793	01-27-1981	Fairand et al.	***************************************
	13.	4,740,694	04-26-1988	Nishimura et al.	
	14.	4,978,862	12-18-1990	Silva et al.	
	15.	5,659,187-A	08-19-1997	Legoues et al.	
	16.	5,995,217-A	11-30-1999	Watanabe	
	17.	6,075,592-A	06-13-2000	Banerjee et al.	
	18.	6,108,079-A	08-22-2000	Maeshima et al.	
	19.	6,160,615-A	12-12-2000	Matsui et al.	
	20.	6,256,092-B1	07-03-2001	Tomita et al.	
	21.	6,429,968-B1	08-06-2002	Carver	
	22.	6,462,817-B1	10-08-2002	Strocchia-Rivera	
•••	23.	6,893,936-B1	05-17-2005	Chen et al.	
	24.	6,911,347-B2	06-28-2005	Higgs	

Examiner		Date	
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^{*} Examiner: Initial if reference is considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with your communication with applicant.

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	Substit	tute for form 1449	<i>9</i> /P10		Application No.:	10/549,865		
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Sheet		2	of	5	Attorney Docket No.:	NAN65 US (8037)		
	25	7 112 276 D1		09-26-2006	Higgs et al.			
1	25.	7,113,276-B1		09-20-2000	niggs et al.			

1	25.	7,113,276-B1	09-26-2006	Higgs et al.	
	26.	7,139,083-B2	11-21-2006	Fielden et al.	
	27.	7,245,696-B2	07-17-2007	Yun et al.	

	Low		Publication Date	Nome of Potentee or Application of	Pages, Columns, Lines, Where	T
Examiner Initials*	Cite No.	Foreign Patent Document	MM-DD-YYYY	Name of Patentee or Application of Cited Document	Relevant Passages or Relevant	Т
		Country Code Number Kind Code (if known)			Figures Appear (if known)	├ ──
	28.	JP-11-274257	10-08-1999	Shinetsu Handotai Co., Ltd.	English abstract only	
	29.	JP-11-354599	12-24-1999	MEMC KK	English abstract only	
	30.	JP-2000-193597-A	07-14-2000	Sumitomo Metal Ind., Ltd.	English abstract only	
··	31.	JP-2003-045928-A	02-14-2003	Shinetsu Handotai Co., Ltd.	English abstract only	
	32.	WO-98/11425-A1	03-19-1998	Bio-Rad Micromeasurements		
				Limited et al.		Ь.
	33.	WO-02/29883-A1	04-11-2002	AOTI Operating Company, Inc.		l
	34.	WO-02/077621-A1	10-03-2002	AOTI Operating Company, Inc.		
*	35.	WO-2004/010121-A1	01-29-2004	AOTI Operating Company, Inc.		
	36.	WO-2004/090516-A1	10-21-2004	AOTI Operating Company, Inc.		
	37.	WO-2007/005438-A2, A3	01-11-2007	Accent Optical Technologies, Inc.		
	38.	WO-2007/008311-A2	01-18-2007	Accent Optical Technologies, Inc.		
	39.	WO-2007/008399-A2, A3	01-18-2007	Accent Optical Technologies, Inc.		
	40.	WO-2007/008430-A2, A3	01-18-2007	Accent Optical Technologies, Inc.		

Examiner	Date	
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Substitute for form 1449/PTO			Complete if Known			
Substitute for form 1449/F10		Application No.:	10/549,865			
		I DISC		Filing Date:	July 28, 2006	
	INFORMATION STATEMENT I			First Named Inventor:	Victor Higgs	<u> </u>
STATEMENT BY APPLICANT (Use as many sheets as necessary)				Art Unit:	2886	
		Examiner Name:	Isiaka O. Akanbi			
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		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	41.	Bajaj, J. et al. (June 1, 1993). "Spatially resolved characterization of HGCDTE materials and devices by scanning laser microscopy," Semiconductor Science and Technology 8(6S):872-877.	
_	42.	Bellone, S. et al. (1991). "Recombination measurement of n-type heavily doped layer in high-low silicon junctions," <i>IEEE Trans. Electron. Devices</i> 38(3):532-537.	
	43.	Commere, B. et al. (September 1988). "Control of the fabrication steps of InP MIS transistors by means of scanning photoluminescence measurements," <i>Journal de Physique</i> , Colloque, Paris, France 49(C-4)(Suppl. 9): 431-436.	
	44.	Derbyshire, K. (Summer 2004). "The engineered substrate's balancing act: performance gains versus greater costs and increased yield risks," <i>Yield Management Solutions Magazine</i> located at http://www.kla-tencor.com/company/magazine/summer04/coverstory.pdf , pp. 29.	
	45.	DiStefano, T.H. et al. (February 1987). "Non-destructive, non-contacting test of Si wafers by thermore-flectance," <i>IBM Technical Disclosure Bulletin</i> , 10 pages.	
	46.	Fitzgerald, E.A. et al. (November 3, 1998). "Dislocations in relaxed SiGe/Si heterostructures," MIT Department of Materials Science and Engineering and AmberWave Technologies, pp. 227-238.	
-	47.	Higgs, V et al. (February 15, 1993). "Characterization of compositionally graed Si1-xGex alloy layers by photoluminescence spectroscopy and by cathodoluminescence spectroscopy and imaging," <i>Journal of Applied Physics</i> 73(4):152-156.	
	48.	Higgs, V. (2000). "Characterization of Si, SiGe, and SOI structures using photoluminescence, "Materials Research Society Symposium Proceedings 588:129-140.	
	49.	Higgs, V. et al. (September 13, 1999). "Application of room temperature photoluminescence for the characterization of impurities and defects in silicon," <i>Proceedings of SPIE</i> 3895:21-37.	
	50.	Korsunska, N.E. et al. (July 2004). "High temperature photoluminescence spectroscopy in p-type SiC," Semiconductor Science and Technology 19(7):833-838.	
	51.	Miner, C.J. (1992). "Non-destructive, whole wafer assessment of optoelectronic epitaxial materials," Semicond. Sci. Technol. 7:A10-A15.	
	52.	Montangero, P. et al. (May 1, 1994). "Optical-beam-induced current and photoluminescence techniques for localization of crystallographic defects in optoelectronic devices," <i>Materials Science and Engineering B</i> B24(1/03):175-179.	
	53.	Moore, C.J.L. et al. (June 1990). "A spatially resolved spectrally resolved photoluminescence mapping system," J. Crystal Growth 103(1/4):21-27.	
	54.	Pritchard, R.E. et al. (June 1, 1993). "Composition assessment by spatially resolved photoluminescence of INGAAS and INGAASP epilayers grown on recessed INP substrates," Semiconductor Science and Technology 8(6):1166-1172.	
	55.	Ressel, P. et al. (1993). "Optimized proton implantation step for vertical-cavity surface-emitting lasers," <i>Electron. Lett.</i> 29(10):918-919.	

Examiner	Date		
Signature:	Considered	:	

^{*} Examiner: Initial if reference is considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with your communication with applicant.

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Su	bstitute for form 144	9/P10		Application No.:	10/549,865	
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	,			Examiner Name:	Isiaka O. Akanbi	
Sheet	4	of	5	Attorney Docket No.:	NAN65 US (8037)	

56.	Ribes, A.C. et al. (May 1, 1995). "Photoluminescence imaging of porous silicon using a confocal scanning laser macroscope/microscope," <i>Applied Physics Letters</i> 66(18):2321-2323.
57.	Tajima, M. (1990). "Characterization of semiconductors by photoluminescence mapping at room temperature," <i>Journal of Crystal Growth</i> 130:1-7.
58.	Tajima, M. et al. (1990). "Mapping of microdefects in silicon crystals by photoluminescence at room temperature," Semiconductor Silicon 1990 from Proceedings of the Sixth International Symposium on Silicon Materials Science and Technology, eds. H. R. Huff et al., Electrochem. Soc., Inc.: Pennington, NJ, pp. 994-1004.
59.	Titus, J. (June 1, 2004). "Keep an eye on wafer defects," <i>Test & Measurement World</i> located at http://www.reed-electronics.com/tmworld/article/CA420488.html , 5 pages.
60.	Westrate, S. et al. (February 2002). "Photoluminescence mapping detects CU contamination in SI wafers," Solid State Technology 45(2):57-58.
61.	"RPM2000 Rapid Photoluminescence Mapper," Sales Brochure, Date Unknown, 6 pages.
62.	"SPHER: The key to revealing hidden problems in Siwafers," Sales Brochure, Date Unknown, 8 pages.
63.	Office Action mailed on January 5, 2000 for U.S. Application No. 09/254,521 filed on March 8, 1999 by Higgs et al., 6 pages.
64.	Response to Office Action mailed on September 19, 2005 for U.S. Application No. 09/254,521 filed on March 8, 1999 by Higgs et al., 14 pages.
- 65.	Notice of Allowance mailed on May 18, 2006 for U.S. Application No. 09/254,521 filed on March 8, 1999 by Higgs et al., 14 pages.
66.	Restriction Requirement mailed on June 14, 2007 for U.S. Application No. 11/177,735 filed on July 8, 2005 by Buczkowski, 6 pages.
67.	Response to Restriction Requirement mailed on July 23, 2007 for U.S. Application No. 11/177,735 filed on July 8, 2005 by Buczkowski, 16 pages.
68.	Office Action mailed on September 12, 2007 for U.S. Application No. 11/177,735 filed on July 8, 2005 by Buczkowski, 42 pages.
69.	Office Action mailed on October 3, 2007 for U.S. Application No. 11/426,877 filed on June 27, 2006 by Hummel et al., 8 pages.
70.	Response to Office Action mailed on December 20, 2007 for U.S. Application No. 11/426,877 filed on June 27, 2006 by Hummel et al., 10 pages.
71.	Ex Parte Quayle Action mailed on June 11, 2007 for U.S. Application No. 11/427,080 filed on June 28, 2006 by Laurent et al., 6 pages.
72.	Request for Continued Examination and Amendment mailed on August 10, 2007 for U.S. Application No. 11/427,080 filed on June 28, 2006 by Laurent et al., 5 pages.
73.	Office Action mailed on October 10, 2007 for U.S. Application No. 11/427,080 filed on June 28, 2006 by Laurent et al., 7 pages.
74.	International Search Report mailed on December 18, 1997 for PCT Application No. PCT/GB97/02388 filed on September 5, 1997 by Bio-Rad Micromeasurements, Ltd, 2 pages.

Examiner	Date	
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	Sub	stitute for form 144	9/210		Application No.:	10/549,865	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)					Filing Date:	July 28, 2006	
					First Named Inventor:	Victor Higgs	
					Art Unit:	2886	
					Examiner Name:	Isiaka O. Akanbi	
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75.	International Search Report mailed on August 31, 2007 for PCT Application No. PCT/US06/25083 filed on June 27, 2006 by Accent Optical Technologies, Inc., 4 pages.
76.	International Search Report mailed on October 1, 2007 for PCT Application No. PCT/US06/24938 filed on June 27, 2006 by Accent Optical Technologies, Inc., 4 pages.
77.	International Search Report mailed on September 4, 2007 for PCT Application No. PCT/US06/25257 filed on June 28, 2006 by Nanometrics, Inc., 2 pages.
78.	International Search Report mailed on July 22, 2004 for PCT Application No. PCT/GB2004/001521 filed on April 8, 2004 by AOTI Operating, Inc., 4 pages.

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